

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A data bus configuration, comprising:

a at least one control station;

at least one reception station;

a data bus configured to operate operated in a multiplex mode and coupled connected to said control station and to said reception station; and

a control bus coupled connected to said control station and to said reception station, wherein said control station is configured to allocate a logical channel, via said control bus, and through said control bus between said control station and allocating a logical channel to said reception station.

2. (Currently Amended) A method for operating a data bus configuration having a at least one control station, at least one reception station, a data bus configured to operate operated in a multiplex mode and coupled connected to said the control station and to said the reception station, and a control bus coupled connected to said the control station and to said the reception station, which comprises the steps of said method comprising:

transmitting an address by said using the control station to transfer an address onto via the data bus;

continuously monitoring the data bus by said reception station;

for soliciting said the reception station when said address transmitted by said control station matches an address designated for said reception station;

allocating a logical channel between said to the solicited reception station and said control station,  
via through the control bus; and

interchanging data between said the control station and said the reception station for a time period  
that as long as the logical channel remains allocated to said the reception station and is  
called.

3. (Currently Amended) The method according to claim 2, wherein said soliciting step which  
further comprises soliciting said the reception station through the control bus by calling the  
allocated logical channel at a same time as a transfer of the data.

4. (Currently Amended) The method according to claim 2, wherein said soliciting step which  
further comprises soliciting said the reception station through the control bus by calling the  
allocated logical channel before a transfer of the data.

5. (Currently Amended) A data bus configuration, comprising:

a at least one control station;

at least one reception station;

a data bus configured to operate operated in a multiplex mode and coupled connected to said control  
station and to said reception station; and

a control bus coupled connected to said control station and to said reception station, wherein said  
control station is configured to allocate a logical channel, via said control bus, between said control  
station and said reception station.[[;]]

said control station allocating a logical channel to said reception station through said control

~~bus; wherein and said control station and said reception station interchange interchanging data for a time period while for as long as said logical channel remains allocated to said reception station and is called.~~

6. (New) The data bus configuration according to claim 1, wherein said control station is configured to transmit an address of a reception unit on said data bus before data is to be interchanged between said control station and said reception unit.

7. (New) The data bus configuration according to claim 6, wherein said reception station is configured to continuously monitor said data bus and determine when said address transmitted by said control station matches an address designated for said reception station.

8. (New) The data bus configuration according to claim 7, wherein said control station allocates a logical channel between said control station and said reception station, such that data can be interchanged between said respective stations.

9. (New) The data bus configuration according to claim 8, wherein data is interchanged between said control station and said reception station for a time period that the logical channel remains allocated on said control bus.

10. (New) The data bus configuration according to claim 8, wherein said reception station is configured to continuously monitor said control bus and determine when a logical channel transmitted by said control bus matches the allocated logical channel designated for said reception station.

11. (New) The data bus configuration according to claim 9, wherein data is interchanged between said control station and said reception station until the control station allocates the logical channel to another reception station.

12. (New) The data bus configuration according to claim 3, wherein data is interchanged between said control station and said reception station until the control station allocates the logical channel to another reception station.
  
13. (New) The data bus configuration according to claim 4, wherein data is interchanged between said control station and said reception station until the control station allocates the logical channel to another reception station.